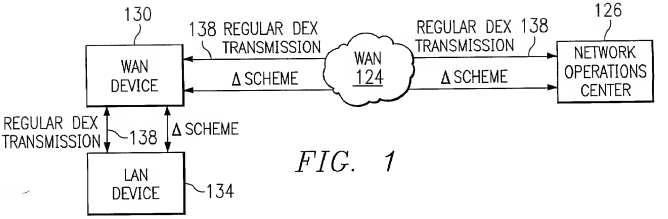


FIG. 1

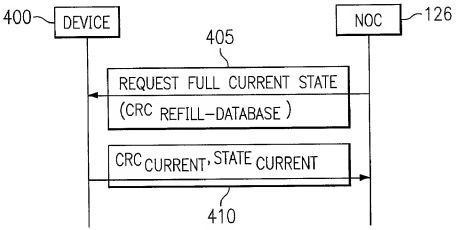


FIG. 4

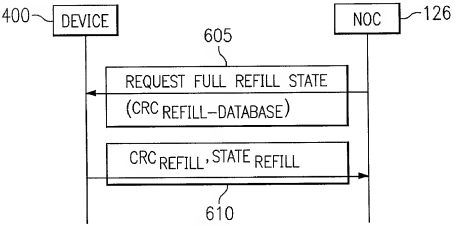


FIG. 6

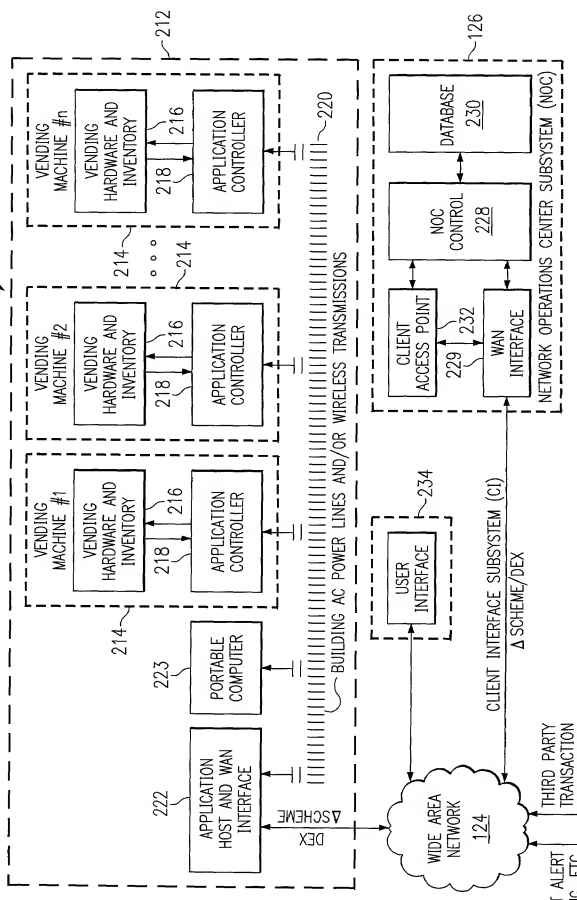


FIG. 2

10150"99C5860

SPECIAL FIELD	305 FIELDS THAT DO NOT CHANGE FREQUENTLY	FIELDS THAT CHANGE FREQUENTLY 320	NON-STANDARD FIELDS BLOCK
(0) NSL*12	(1) DXS*9259630007*VA*V1/1*1** 310	(46) VA1*100820*1935*100470-1922 315	(84) MA5*ERROR*ACLO
	(2) SE*60*0001	(47) CA2*	(85) PA5*ColNum
	(3) DXE*1*1	(48) CA3*135040*38015*38225*588*135545*38290*38255*590	
	(4) ST*001*0001	(49) CA4*35975*1605*36130*1605	
	(5) ID1*1296170514*GIII-VENDOR 67015-6*6***	(50) CA6*	
	(6) ID4*2*1*	(51) CA17*	
	(7) CA1*	(52) DA2*0*0*0*0	
	(8) BA1*CAI000489604085*BA30B -2*7**ASSET	(53) TA2*0*0*0*0	
	(9) DA1*	(54) PA2*299*14755*296*14680	
	(10) LS*0100	(55) PA2*399*19795*397*19745	
	(11) PA1*1*35*	(56) PA2*241*12385*240*12360	
	(12) PA1*2*35*	(57) PA2*231*11010*230*10985	
	(13) PA1*3*35*	(58) PA2*139*7605*138*7580	
	(14) PA1*4*35*	(59) PA2*380*19875*379*19850	
	(15) PAI*5*35*	(60) PA2*125*7310*123*7235	
	(16) PAI*6*35*	(61) PA2*71*4560*70*4535	
	(17) PA1*7*35*	(62) PA2*50*3525*49*3500	
	(18) PA1*8*35*	(63) PA2*0*0*0*0	
	(19) PA1*9*35*	(64) PA2*0*0*0*0	
	(20) PA1*10*35*	(65) PA2*0*0*0*0	
	(21) PA1*11*35*	(66) EA2*D0*174	
	(22) PA1*12*35*	(67) EA3*5	

FIG. 3A TO FIG. 3B

TOTTSO'99EESB60

FIG. 3B FROM FIG. 3A

(23) LE*0100
(24) MA5*BAUD*9600
(25) MA5*SWITCH*UNLOCK*1**7
(26) MA5*TUBE2*
(27) MA5*PACKAGE*
(28) MA5*STATUS*
(29) MA5*CCOC*
(30) MA5*PREV*
(31) MA5*LANG*
(32) MA5*LITE*
(33) MA5*RFRC*
(34) MA5*BLC1*
(35) MA5*BLC2*
(36) MA5*DISC*
(37) MA5*OVER*
(38) MA5*SDEP*
(39) SD1*000000000000
(40) EA2*CR**1
(41) VA2*0*14*0*14
(42) CA5*
(43) CA9*
(44) VA3*
(45) EA7*46*53

(68) G85*4292
(69) MA5*TUBE1*2*65*105*75
(70) MA5*SEL0*1,2*277*319
(71) MA5*SEL1*3,4*379*434
(72) MA5*SEL2*5,6*209*219
(73) MA5*SEL3*7*224*270
(74) MA5*SEL4*8*109*137
(75) MA5*SEL5*9*372*465
(76) MA5*SEL6*10*70*84
(77) MA5*SEL7*11*53*57
(78) MA5*SEL8*12*32*37
(79) MA5*SEL9—*0*0
(80) MA5*SEL10**0*0
(81) MA5*SEL11**0*0
(82) MA5*SEL12**0*0
(83) MA5*TIME*

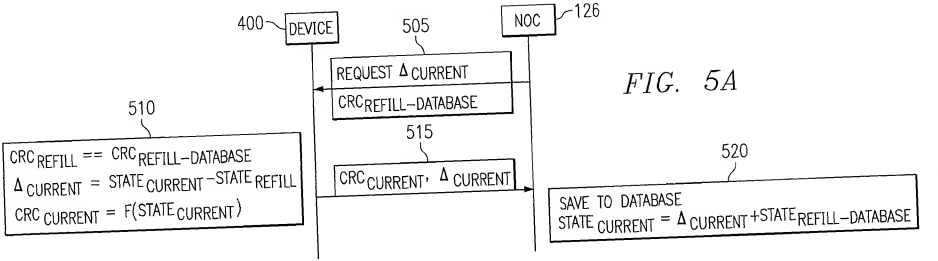

400
DEVICE
505
NOC
126
REQUEST Δ CURRENT
CRC REFILL–DATABASE
510
CRC REFILL == CRC REFILL–DATABASE
Δ CURRENT = STATE CURRENT –STATE REFILL
CRC CURRENT = F(STATE CURRENT)
515
CRC CURRENT, Δ CURRENT
520
SAVE TO DATABASE
STATE CURRENT = Δ CURRENT +STATE REFILL–DATABASE

FIG. 5A

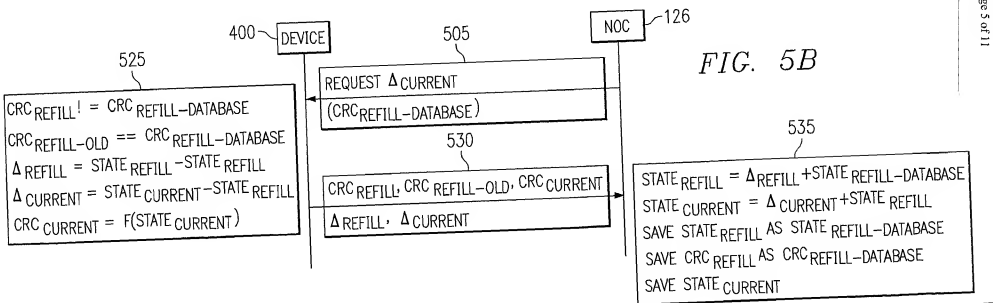

400
DEVICE
505
NOC
126
525
CRC REFILL ! = CRC REFILL–DATABASE
CRC REFILL–OLD == CRC REFILL–DATABASE
Δ REFILL = STATE REFILL –STATE REFILL
Δ CURRENT = STATE CURRENT –STATE REFILL
CRC CURRENT = F(STATE CURRENT)
REQUEST Δ CURRENT
(CRC REFILL–DATABASE)
530
CRC REFILL, CRC REFILL–OLD, CRC CURRENT
Δ REFILL, Δ CURRENT
535
STATE REFILL = Δ REFILL +STATE REFILL–DATABASE
STATE CURRENT = Δ CURRENT +STATE REFILL
SAVE STATE REFILL AS STATE REFILL–DATABASE
SAVE CRC REFILL AS CRC REFILL–DATABASE
SAVE STATE CURRENT

FIG. 5B

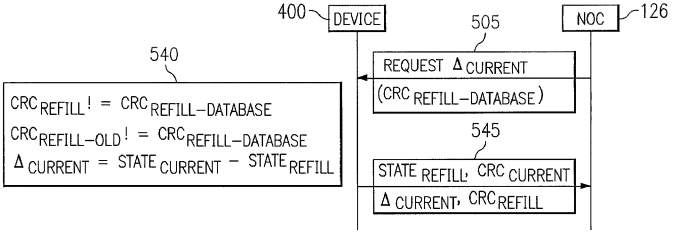


FIG. 5C

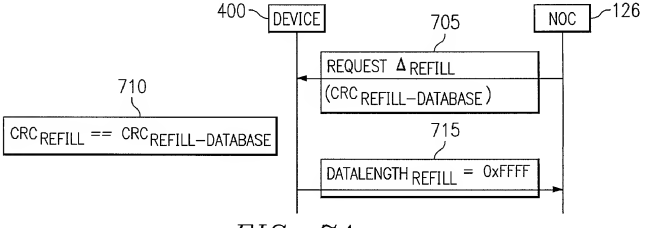


FIG. 7A

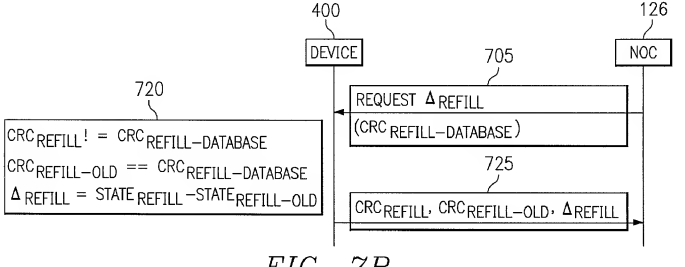


FIG. 7B

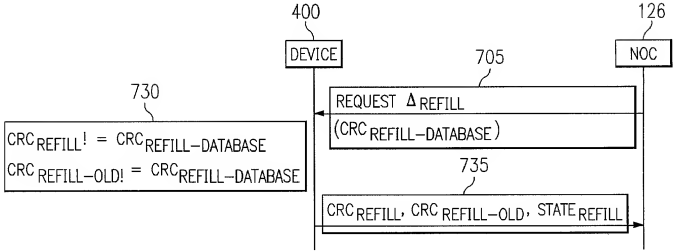

400
126
DEVICE
NOC
705
730
REQUEST Δ REFILL
(CRC REFILL–DATABASE)
CRC REFILL! = CRC REFILL–DATABASE
CRC REFILL–OLD! = CRC REFILL–DATABASE
735
CRC REFILL, CRC REFILL–OLD, STATE REFILL

FIG. 7C

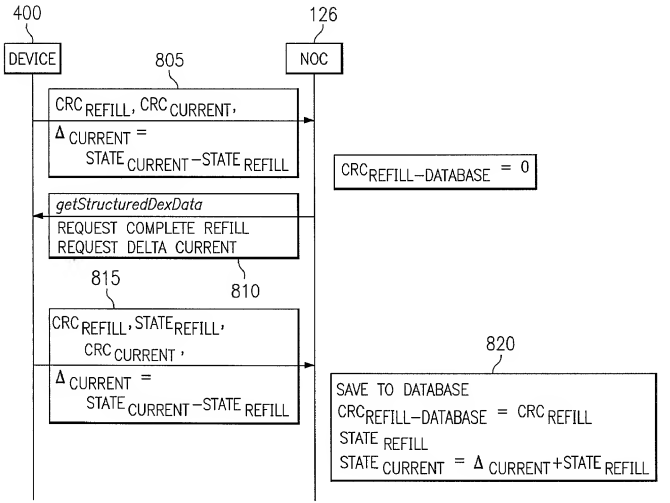
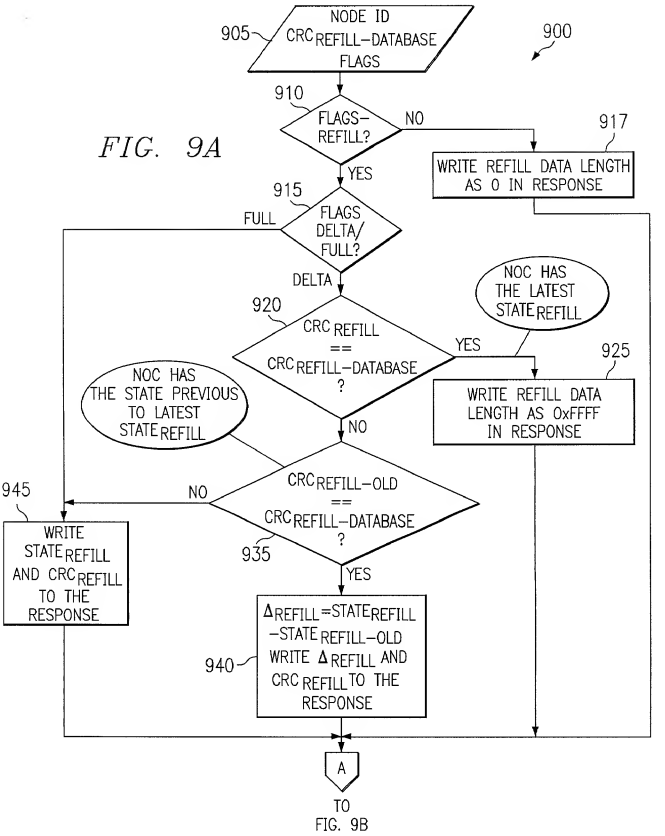

400
126
DEVICE
805
NOC
CRC REFILL, CRC CURRENT,
Δ CURRENT =
STATE CURRENT – STATE REFILL
CRC REFILL–DATABASE = 0
getStructuredDexData
REQUEST COMPLETE REFILL
REQUEST DELTA CURRENT
815
810
CRC REFILL, STATE REFILL,
CRC CURRENT,
Δ CURRENT =
STATE CURRENT – STATE REFILL
820
SAVE TO DATABASE
CRC REFILL–DATABASE = CRC REFILL
STATE REFILL
STATE CURRENT = Δ CURRENT + STATE REFILL

FIG. 8

FIG. 9A


NODE ID
CRC REFILL–DATABASE
FLAGS
905
900
910
FLAGS–REFILL?
NO
917
WRITE REFILL DATA LENGTH AS 0 IN RESPONSE
YES
915
FLAGS DELTA/FULL?
FULL
DELTA
NOC HAS THE LATEST STATE REFILL
920
CRC REFILL == CRC REFILL–DATABASE ?
YES
925
WRITE REFILL DATA LENGTH AS 0xFFFF IN RESPONSE
NOC HAS THE STATE PREVIOUS TO LATEST STATE REFILL
NO
945
NO
CRC REFILL–OLD == CRC REFILL–DATABASE ?
935
WRITE STATE REFILL AND CRC REFILL TO THE RESPONSE
YES
ΔREFILL=STATE REFILL –STATE REFILL–OLD
940
WRITE ΔREFILL AND CRC REFILL TO THE RESPONSE
A
TO FIG. 9B

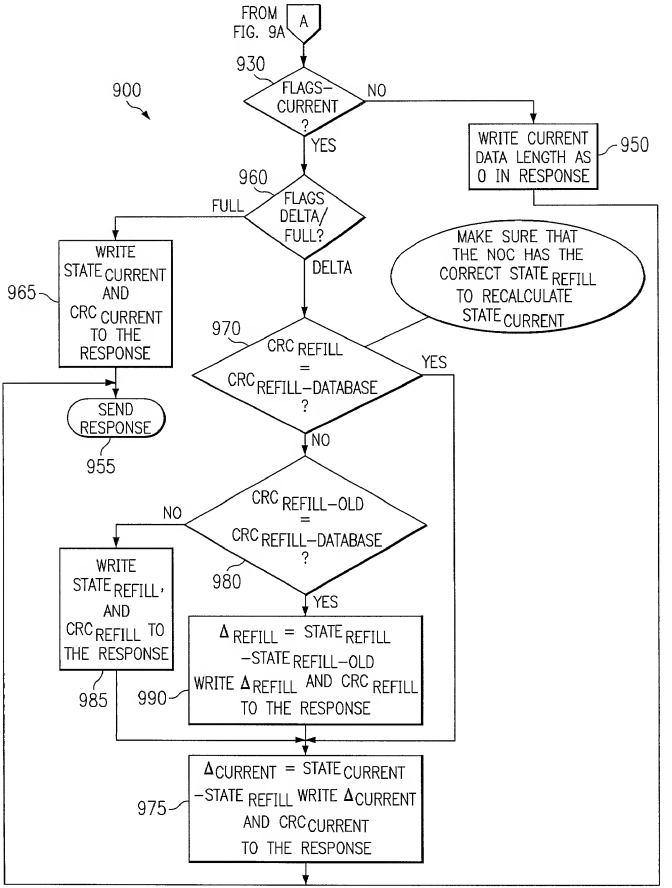
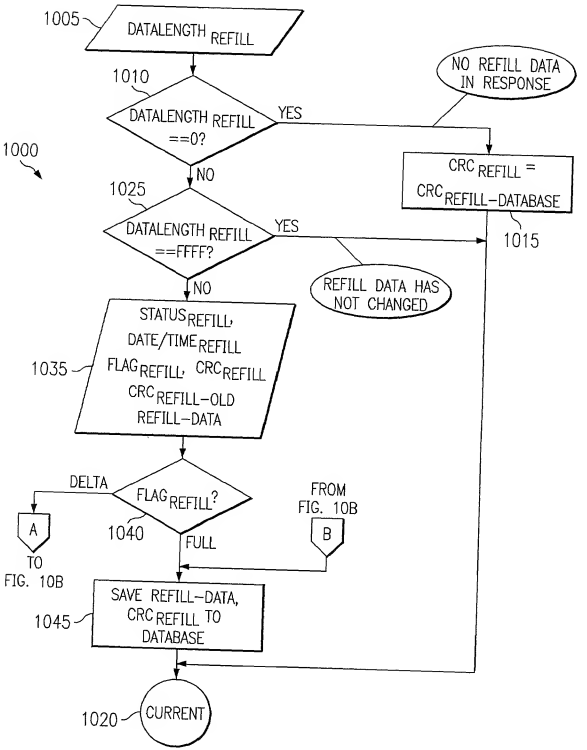

FROM FIG. 9A
A
900
930
FLAGS–CURRENT ?
NO
YES
WRITE CURRENT DATA LENGTH AS 0 IN RESPONSE
950
960
FLAGS DELTA/FULL?
FULL
DELTA
WRITE STATE CURRENT AND CRC CURRENT TO THE RESPONSE
965
MAKE SURE THAT THE NOC HAS THE CORRECT STATE REFILL TO RECALCULATE STATE CURRENT
970
CRC REFILL = CRC REFILL–DATABASE ?
YES
NO
SEND RESPONSE
955
CRC REFILL–OLD = CRC REFILL–DATABASE ?
NO
YES
980
WRITE STATE REFILL, AND CRC REFILL TO THE RESPONSE
985
Δ REFILL = STATE REFILL –STATE REFILL–OLD
WRITE Δ REFILL AND CRC REFILL TO THE RESPONSE
990
ΔCURRENT = STATE CURRENT –STATE REFILL WRITE ΔCURRENT AND CRC CURRENT TO THE RESPONSE
975

FIG. 9B

FIG. 10A


1005
DATALENGTH REFILL
1010
DATALENGTH REFILL ==0?
YES
NO REFILL DATA IN RESPONSE
1000
NO
CRC REFILL = CRC REFILL-DATABASE
1015
1025
DATALENGTH REFILL ==FFFF?
YES
REFILL DATA HAS NOT CHANGED
NO
1035
STATUS REFILL, DATE/TIME REFILL FLAG REFILL, CRC REFILL CRC REFILL-OLD REFILL-DATA
DELTA
FLAG REFILL?
1040
FULL
FROM FIG. 10B
A
TO FIG. 10B
B
1045
SAVE REFILL-DATA, CRC REFILL TO DATABASE
1020
CURRENT

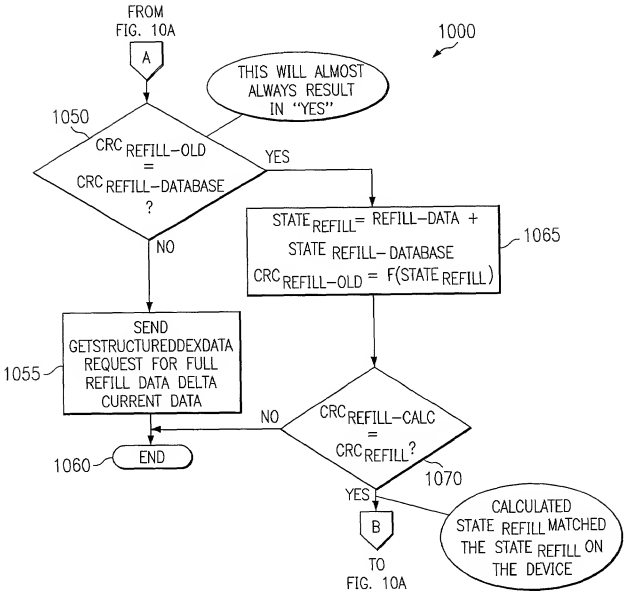

FROM FIG. 10A
A
1000
THIS WILL ALMOST ALWAYS RESULT IN "YES"
1050
CRC REFILL–OLD = CRC REFILL–DATABASE ?
YES
NO
STATE REFILL = REFILL–DATA + STATE REFILL– DATABASE
CRC REFILL–OLD = F(STATE REFILL)
1065
SEND GETSTRUCTUREDDEXDATA REQUEST FOR FULL REFILL DATA DELTA CURRENT DATA
1055
CRC REFILL–CALC = CRC REFILL?
NO
1060
END
1070
YES
B
TO FIG. 10A
CALCULATED STATE REFILL MATCHED THE STATE REFILL ON THE DEVICE

FIG. 10B